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10/552,866

02/06/2006

Pierre Vincent

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BACHMAN & LAPOINTE, P.C.

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SUITE 1201

NEW HAVEN, CT 06510

EXAMINER

ROBINSON, RYAN C

ART UNIT

PAPER NUMBER

2615

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DELIVERY MODE

07/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/552,866 | Applicant(s) VINCENT, PIERRE | |
| | Examiner RYAN C. ROBINSON | Art Unit 2615 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-17, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/11/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 are pending in the current application.
2. The examiner acknowledges the preliminary amendments filed on 10/11/2005.
3. Claims 1-10 have been canceled on 10/11/2005.
4. Claims 11-20 have been added on 10/11/2005.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "higher than around 3 kHz to 5 kHz" in claim 20 is a relative term which renders the claim indefinite. The term "higher than around 3 kHz to 5 kHz" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Priority

7. This application claims priority from PCT application number PCT/FR2004/050154, filed on 4/9/2004, which claims priority from French Patent application number 0304562, filed on 4/11/2003.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 11-17, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurley, US Patent No. 2,175,434, published on 10/10/1939, (hereby Hurley).

10. As to claim 11, Hurley teaches a system for the projection of cinematographic works or digital works with sound (Col. 1, lines 1-3) with at least one sound channel, comprising a screen (16) said system further comprising: the screen being a non-perforated screen (Col. 2, lines 10-11); a flat sound transducer (56) placed against the screen (16) to a rear thereof in relation to a direction of projection, and an extreme treble speaker (60) being disposed on a periphery of the screen. It is noted however, in the particular embodiment, that

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Hurley is silent as to the frequency ranges of the individual speakers (56), and does not disclose whether or not the flat sound transducers (56) are woofers, or medium/treble speakers.

On the other hand, Hurley discloses in the embodiment shown in Fig. 4, that the flat sound transducers are different frequencies (Col. 3, lines 29-34). One set of speakers (18, 44, 46, and 48) are for predominately low tones, and the other set (50 and 52) is for predominately high tones, corresponding to at least one medium/treble speaker.

It would have been obvious to one of ordinary skill in the art to incorporate the external extreme treble speaker (60), into the embodiment shown in Fig. 4. The motivation for the combination for the added benefit of the more accurate reproduction of high frequency sounds, due to the perforations in the mask where the extreme treble speaker is located.

11. As to claim 12, Hurley discloses that the medium/treble transducer (50, 52) is disposed substantially above the at least one woofer (46, 48).

12. As to claim 13, Hurley discloses that the extreme treble speaker (60) is disposed above the screen and substantially above the transducer (56).

13. As to claim 14, Hurley does not explicitly disclose a system with multi-channel sound, further comprising at least two lateral channels, and a pair of extreme treble speakers for the at least two lateral channels disposed on either

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side of the screen. However, examiner takes official notice that it would have been obvious to one of ordinary skill in the art to adapt the system disclosed by Hurley combination to multi channel sound, by simply adding a second extreme treble speaker (60), since the combination already has a left (50) and a right (52) medium/treble speaker. Furthermore Hurley teaches that other locations are possible for high frequency speakers are possible (Col. 3, lines 57-59), including on either side of the screen.

14. As to claim 15, with respect to claim 14, the Hurley combination does not explicitly teach that the extreme treble speakers of the at least two lateral channels are disposed substantially at a height of the flat transducers of the corresponding channels. However, it would have been obvious to one of ordinary skill in the art to place the extreme treble speakers at the same height as the medium/treble speakers, given the fact that Hurley teaches that the extreme treble speakers can be placed in various locations (Col. 3, lines 57-59).

15. As to claim 16, the Hurley combination does not explicitly teach as system with multi-channel sound, further comprising two lateral channels, and the extreme treble speakers for the lateral channels being disposed above the screen. However, examiner takes official notice that it would have been obvious to one of ordinary skill in the art to adapt the system disclosed by Hurley combination to multi channel sound, by simply adding a second extreme treble speaker (60), since the combination already has a left (50) and a right (52)

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medium/treble speaker. Furthermore Hurley teaches that other locations are possible for high frequency speakers are possible (Col. 3, lines 57-59), including above the screen.

16. As to claim 17, with respect to claim 16, the Hurley combination does not explicitly teach that the extreme treble speakers of the lateral channels are disposed substantially above the flat transducers of the corresponding channels. However, it would have been obvious to one of ordinary skill in the art to place the extreme treble speakers substantially above the medium/treble speakers, given the fact that Hurley teaches that the extreme treble speakers can be placed in various locations (Col. 3, lines 57-59).

17. As to claims 19-20, Hurley is silent as to the frequency ranges of the transducers, specifically the woofers around 300 Hz to 800 Hz and the extreme treble speaker being arranged to produce sounds with a frequency that is higher than around 3 kHz to 5kHz. It would have been obvious to one of ordinary skill in the art to adjust speaker parameters for a desired frequency range.

Allowable Subject Matter

18. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Specifically, the prior art does not teach or suggest a motivation to adapt the system for four channel

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operation. The addition of more than two channels added to the system would require an additional middle/treble flat transducer on the screen in the center channel of the screen, which would possibly interfere with the placement and function of the woofers 44 and 46.

Conclusion

The prior art made of record

- a. US Patent Number **2,175,434**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan C. Robinson whose telephone number is (571) 270-3956. The examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Suhan Ni, can be reached on (571) 272-7505. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan Robinson

/Suhan Ni/
Primary Examiner, Art Unit 2614